

03 DEC 2004

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

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04. Okt. 2004	
WV: .....	/ LF: .....

NOTIFICATION OF TRANSMITTAL OF  
INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Rule 71.1)

Date of mailing  
(day/month/year)

01-10-2004

Applicant's or agent's file reference

51019 WO

## IMPORTANT NOTIFICATION

International application No.  
PCT/IB2002/002557

International filing date (day/month/year)

02-07-2002

Priority date (day/month/year)

Applicant  
Nokia Corporation  
et al

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

## 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the *PCT Applicant's Guide*.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed invention is patentable or not" (see Also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

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**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
 (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 51019wo	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/IB 2002/002557	International filing date (day/month/year) 02-07-2002	Priority date (day/month/year) -----
International Patent Classification (IPC) or national classification and IPC H04M1/27, H04Q7/32		
Applicant NOKIA CORPORATION ET AL		

<ol style="list-style-type: none"> <li>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</li> <li>2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.</li> <li>3. This report is also accompanied by ANNEXES, comprising:           <ul style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>4</u> sheets, as follows:               <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</li> <li><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</li> </ul> </li> <li>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</li> </ul> </li> </ol>																	
<ol style="list-style-type: none"> <li>4. This report contains indications relating to the following items:           <table border="0"> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII Certain defects in the international application</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. VIII Certain observations on the international application</td> </tr> </table> </li> </ol>		<input checked="" type="checkbox"/>	Box No. I Basis of the report	<input type="checkbox"/>	Box No. II Priority	<input type="checkbox"/>	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI Certain documents cited	<input type="checkbox"/>	Box No. VII Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII Certain observations on the international application
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<input checked="" type="checkbox"/>	Box No. VIII Certain observations on the international application																

Date of submission of the demand 20-01-2004	Date of completion of this report 29-09-2004
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer Roland Landström /itw Telephone No. +46 8 782 25 00

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/IB 2002/002557

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:

- international search (under Rules 12.3 and 23.1(b))
- publication of the international application (under Rule 12.4)
- international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

the international application as originally filed/furnished

the description:

pages 1 - 17 as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

the claims:

pages \_\_\_\_\_ as originally filed/furnished

pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19

pages\* 1 - 4 received by this Authority on 17-08-2004

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

the drawings:

pages 1 - 4 as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3.  The amendments have resulted in the cancellation of:

the description, pages \_\_\_\_\_  
 the claims, Nos. \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (specify): \_\_\_\_\_  
 any table(s) related to the sequence listing (specify): \_\_\_\_\_

4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages \_\_\_\_\_  
 the claims, Nos. \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (specify): \_\_\_\_\_  
 any table(s) related to the sequence listing (specify): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseeded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	1 - 16	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1 - 16	NO
Industrial applicability (IA)	Claims	1 - 16	YES
	Claims		NO

**2. Citations and explanations (Rule 70.7)**

The invention is intended to provide a method etc. for handling data records of a mobile communication device selectable by speech recognition. In case of failed speech recognition, manual selection is possible.

The following documents were cited in the International Search Report:

A: US 2001047263 A1  
 B: GB 2359457 A  
 C: GB 2355144 A

Document A (page 1, column 2, lines 12 - page 5, column 2, line 5, especially page 2, column 1, lines 9 - 15, page 5, column 1, lines 21 - 31, page 5, column 1, lines 10 - 13, figures 1 - 11, especially figures 8 and 9, abstract) shows a mobile telephone (1100) having a voice processor (3550), which receives voice commands from a user speaking into a microphone (3274), a feature processor (3300) and a display (2400) that displays various choices for the user such as call by name, call number and directory. A caller may enter commands and data either vocally or by using a keypad or some other manual input device. The user can choose the appropriate mode of entering commands at any time in the interaction. In a combined speech and graphical interface, graphical feedback can be used to present alternative choices to the user (page 2, column 1, lines 9 - 15). Figure 9 shows the steps when a user enters a name that sounds like many others in the directory; the system determines whether there are multiple names that match that input by the user (step 910). If so, the system displays a

.../...

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V

list of names (step 915). If the user enters the command to call a specific name (step 920), the system will continue processing by going to step 820 (step 925). If the name is evaluated and recognized, the system will state that it is calling the named person and the graphics will display the same (step 820). According to page 4, column 1, lines 10 - 19, to initiate communications processing, the user may input an attention word or command using any known input device such as verbally or manually using the keypad (3500). The directory includes both a vocal version of the name, the text of the name and the telephone number associated with the name (claim 5).

The invention claimed in amended claims 1, 3, 7 - 10 and 12 differs from what is known from document A essentially in that a second actuator (multiple switching component) causes a display of a list of first or second data records, relating to different applications, on a display, and that a third actuator selects one of the data records/applications.

The technical problem is how to provide an alternative to speech input.

However, document A reveals the idea of entering commands and data either vocally or by using a keypad or some other manual input device. Furthermore, manual input by the use of a similar menu technique wherein an actuator causes a display of a list of data records, relating to different applications/functions, on a display, and another actuator selects one of the data records, is well known, for example in mobile telephones, cf. document C (below).

Therefore, it would be obvious to use this technique and thus arrive at a method, a software tool, a computer program, a computer program product and a mobile communication device having all the essential features of claims 1, 3, 7 - 10 and 12, especially considering the documents A and C belong to the same technical field, and no unexpected technical effect is obtained. Consequently, the invention claimed in claims 1, 3, 7 - 10 and 12 lacks an inventive step.

.../...

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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## Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V

Document C (page 6, line 12 - page 23, line 18, figures 1 - 18c, abstract) shows a mobile phone (2) having speech control, a display (26), a voice dial button (22) and an input device (joystick 28). The functions of the mobile phone (2) are accessed through a menu which is navigated using the joystick (28) which is also used for the selection of one item (page 14, lines 8 - 16).

Document B (page 1, line 29 - page 9, line 2, figures 1 - 5, abstract) shows a portable phone having speech control wherein a voice tag is stored in association with a phone number or an operation to be performed (claims 3, 11).

In claims 2, 4 - 6, 11 and 13 - 16, slight constructional variations are suggested that are obvious to a person skilled in the art, especially considering similar features are well known, for example from documents A - C. Consequently, the invention claimed in claims 2, 4 - 6, 11 and 13 - 16 lacks an inventive step.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

It is unclear whether "user input" in claim 1 and "browsing input" in claims 5 and 6 refer to input by speech or by manual operation of a key or an actuator.

Independent claims 1 and 10 are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document A) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

Claims 15 and 16, which are directed to a mobile communication device, can not refer to claim 9, which is directed to a computer program product.

Applicant: Nokia Corporation  
Our Ref.: 51019 WO (KG/TP)  
Your Ref.: NC 32135 WO

Amended Claims

1. Method for handling data records of a mobile communication device,  
5 wherein at least one pre-stored voice tag is assigned to each of said data records, wherein said voice tags are employed for speech recognition to enable selection of said data records by speech input and recognition on the basis of said voice tags;  
wherein said data records comprise a first set of data records and a second set of data records, wherein both sets of data records relate to different applications of said communication  
10 device;  
said method comprising:
  - receiving an initial user input causing said mobile communication device to be prepared for receiving an acoustic input to perform said speech recognition thereon;
  - receiving a first manual user input by a multiple switching component, which is capable  
15 to exhibit a first input value and a second input value;
  - displaying a list of said first or said second set of data records in accordance with said first input signal and said second input signal of said first user input;
  - receiving a second manual user input identifying one data record of said displayed data records; and
  - transmitting an instruction comprised in said identified data record to at least one application of a plurality of applications executable on said mobile communication  
20 device.
2. Method according to claim 1, wherein data records of said first set each comprise at least one instruction dedicated to a dialing application for dialing a telephone number comprised in said instruction, wherein said first set of data records represents a selection of telephone directory entries, wherein data records of said second set each comprise at least one instruction dedicated to control functions of one or more further applications executed on said mobile communication device in accordance with said instruction, wherein said second  
25 set of data records represents a selection of device functions and device application functions.
3. Method according to claim 1 or claim 2, characterized in that at least one designation is assigned to each of the data records, said designation being displayable.
- 35 4. Method according to anyone of the preceding claims, comprising:

- displaying an indication to said user that an alternative manual user input is operable when receiving said initial user input.

5 5. Method according to anyone of the preceding claims, wherein said displaying of said list of said first set of data records being arranged in a pre-determined sequence comprises:

- displaying at least one data record of said list of said first set of data records;
- receiving a browsing input capable to exhibit a first browsing value and a second browsing value;
- in case said browsing input corresponds to said first browsing value, displaying at least one data record subsequent to said at least one displayed data record; and
- in case said browsing input corresponds to said second browsing value, displaying at least one data record preceding to said at least one displayed data record.

10 6. Method according to anyone of the preceding claims, wherein said displaying of said list of said second set of data records being arranged in a pre-determined sequence comprises:

- displaying at least one data record of said list of said second set of data records;
- receiving a browsing input capable to exhibit a first browsing value and a second browsing value;
- in case said browsing input corresponds to a first browsing value, displaying at least one data record subsequent to said at least one displayed data record; and
- in case said browsing input corresponds to a second browsing value, displaying at least one data record preceding to said at least one displayed data record.

15 7. Software tool for handling data records of a mobile communication device selectable by speech recognition, comprising program code means for carrying out the steps of anyone of claims 1 to 6, when said program is run on a processing device, a computer and/or a mobile communication device.

20 8. Computer program comprising program code means stored on a computer readable medium for carrying out the method for handling data records of a mobile communication device selectable by speech recognition of anyone of claims 1 to 6 when said program product is run on a processing device, a computer and/or a mobile communication device.

25 9. Computer program product comprising program code means stored on a computer readable medium for carrying out the method for handling data records of a mobile communication device selectable by speech recognition of anyone of claims 1 to 6, when said program product is run on a processing device, a computer and/or a mobile communication device.

10. Mobile communication device for handling data records of a mobile communication device which are selectable by speech input and recognition, comprising:

- a plurality of applications executable on said mobile communication device;
- at least one pre-stored voice tag for speech recognition is assigned to each of said data records having assigned, wherein said voice tags are employed for speech recognition to enable selection of said data records by speech input and recognition on the basis of said voice tags;

10                   said data records comprising a first set of data records and a second set of data records, wherein both sets of data records relate to different applications of said communication device;

- a speech recognition component for recognizing acoustic input via a microphone resulting in a selection of one of said data records in accordance with said acoustic input;
- a first actuator for activating said speech recognition component;
- a second actuator being a said multiple switching component capable to generate a first input signal and a second input signal, said second actuator being operable with said speech recognition mode component causing displaying of a list of said first or said second set of said data records on said display in accordance with said first input signal and said second input signal; and
- a third actuator for selecting one data record of said displayed list and for transmitting an instruction comprised in said selected data record to at least one of the plurality of applications to be operated in accordance with said instruction.

20                   11. Mobile communication device according to claim 10, wherein data records of said first set each comprise at least one instruction dedicated to a dialing application for dialing a telephone number comprised in said instruction, wherein said first set of data records represents a selection of telephone directory entries, wherein data records of said second set each comprise at least one instruction dedicated to control functions of one or more further applications executed on said mobile communication device in accordance with said instruction, wherein said second set of data records represents a selection of device functions and device application functions;

25                   12. Mobile communication device according to claim 10 or claim 11, comprising:

- said set of data records each comprising at least one designation, said designations being for display.

13. Mobile communication device according to claim 10 or claim 12, wherein said first actuator for activating said speech recognition component causes a display to indicate to a user that an alternative manual user input is operable.

5      14. Mobile communication device according to anyone of the claims 10 to 13, wherein said first input signal causes a display of at least one data record of said list of said first set of data records, said first set of data records being arranged in a pre-determined sequence, wherein:

- said second actuator operable with said speech recognition component generates a first browsing signal and a second browsing signal;

10     in case said displaying of said at least one data record of said first set of data records has been initiated:

- said first browsing signal causes a displaying of at least one subsequent data record of said first set on said display; and
- said second browsing signal causes a displaying of at least one preceding data record of said first set on said display.

15     15. Mobile communication device according to anyone of the claims 9 to 14, wherein said second input signal causes a displaying of at least one data record of said list of said second set of data records, said second set of data records being arranged in a pre-determined sequence, further comprising:

- said second actuator being operable with said speech recognition component for generating a first browsing signal and a second browsing signal;

20     in case said displaying of said at least one data record of said second set of data records has been initiated:

- said first browsing signal causing a displaying of at least one subsequent data record of said second set on said display; and
- said second browsing signal causing a displaying of at least one preceding data record of said second set on said display.

25     16. Mobile communication device according to anyone of the claims 9 to 15, wherein said second actuator is able to generate at least two different signals upon input of a user.

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